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**Amendments to the Claims:**

Please replace all prior versions, and listings of claims in the application with the following listing of claims.

**Listing of claims**

Claims 1-3 (canceled)

Claim 4 (currently amended): A method of adjusting timing of amplitude and phase components in an output ~~[[RF]]~~ Radio Frequency (RF) signal, the method comprising:

generating amplitude and phase signals from input data;

adjusting the generated amplitude and phase signals to produce adjusted amplitude and phase signals;

supplying the adjusted amplitude and phase signals to a radio frequency circuit; and transmitting an output RF signal from the radio frequency circuit, wherein adjusting the generated amplitude and phase signals comprises:

detecting an output RF signal to produce detected amplitude and phase signals;

~~subjecting~~ delaying the generated phase signal ~~[[to]]~~ by a first time delay amount to produce a delayed phase signal, the first time delay amount being such as to minimize a difference between the delayed phase signal and the detected phase signal;

~~subjecting~~ delaying the generated amplitude signal ~~[[to]]~~ by a second time delay amount to produce a delayed amplitude signal, the second time delay amount being such as to minimize the difference between the delayed amplitude signal and the detected amplitude signal;

using the first and second time delay amounts to determine a third time delay amount and a fourth time delay amount; and

adjusting the generated ~~amplitude and phase signals~~ signal in dependence upon the ~~first and second~~ third time ~~delays~~ delay amount to produce the adjusted phase signal and adjusting the generated amplitude signal in dependence upon the fourth time delay amount to produce the adjusted amplitude signal,

wherein the third and fourth time delay amounts together are such as to compensate for a time delay between the detected phase and detected amplitude signals.

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Claim 5 (original): A method as claimed in claim 4, wherein the adjusted amplitude and phase signals are converted to inphase and quadrature (I and Q) signals for supply to the radio frequency circuit.

Claims 6-8 (canceled)

Claim 9 (currently amended): A method of adjusting timing of inphase and quadrature (I and Q) components in an output ~~[[RF]]~~ Radio Frequency (RF) signal, the method comprising:

- generating inphase and quadrature (I and Q) signals from input data;
- adjusting the generated inphase and quadrature (I and Q) signals to produce adjusted inphase and quadrature (I and Q) signals;
- supplying the adjusted inphase and quadrature (I and Q) signals to a radio frequency circuit; and

- transmitting an output RF signal from the radio frequency circuit, wherein adjusting the generated inphase and quadrature (I and Q) signals comprises:

- detecting an output RF signal to produce detected inphase and quadrature (I and Q) signals;

- ~~subjecting~~ delaying the generated inphase (I) signal ~~[[to]]~~ by a first time delay amount to produce a delayed inphase (I) signal, the first time delay amount being such as to minimize a difference between the delayed inphase (I) signal and the detected inphase (I) signal;

- ~~subjecting~~ delaying the generated quadrature (Q) signal ~~[[to]]~~ by a second time delay amount to produce a delayed quadrature (Q) signal, the second time delay amount being such as to minimize the difference between the delayed quadrature (Q) signal and the detected quadrature (Q) signal;

- using the first and second time delay amounts to determine a third time delay amount and a fourth time delay amount; and

- adjusting the generated inphase ~~and quadrature (I and Q) signals~~ (I) signal in dependence upon the ~~first and second~~ third time delays delay amount to produce the adjusted inphase (I) signal and adjusting the generated quadrature (Q) signal in dependence upon the fourth time delay amount to produce the adjusted quadrature (Q) signal,

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wherein the third and fourth time delay amounts together are such as to compensate for a time delay between the detected inphase (I) and detected quadrature (Q) signals.

Claim 10 (original): A method as claimed in claim 9, wherein the adjusted inphase and quadrature (I and Q) signals are converted to phase and amplitude signals for supply to the radio frequency circuit.

Claims 11-12 (canceled)

Claim 13 (currently amended): Apparatus for adjusting timing of phase and amplitude components of ~~an RF~~ a Radio Frequency (RF) signal, the apparatus comprising:

an RF detector unit for detecting an RF signal and operable to produce detected phase and amplitude signals therefrom;

an adjustment unit connected to receive generated phase and amplitude signals and operable to:

output an adjusted phase and amplitude signals signal in dependence upon a received first adjustment control ~~signals~~ signal; and

output an adjusted amplitude signal in dependence upon a received second adjustment control signal;

a delay unit connected to receive the generated phase and amplitude signals and operable to delay those signals by respective first and second time delays to produce delayed phase and amplitude signals, the ~~respective first time delays~~ delay being determined such that ~~respective differences between detected and delayed phase and amplitude signals are minimized, and the second time delay being determined such that differences between detected and delayed amplitude signals are minimized~~; and

a delay calculation unit which is operable to generate the first and second adjustment control signals in dependence upon the ~~respective first and second~~ time delays and to supply the first and second adjustment control signals ~~in dependence upon respective time delays and to supply the adjustment control signals~~ to the adjustment unit,

wherein the first and second adjustment control signals together are such as to cause the adjustment unit to compensate for a time delay between the detected phase and detected amplitude signals.

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Claims 14-15 (canceled)

Claim 16 (currently amended): Apparatus for adjusting timing of inphase and quadrature (I and Q) components of ~~an RF~~ a Radio Frequency (RF) signal, the apparatus comprising:

an RF detector unit for detecting an RF signal and operable to produce detected inphase and quadrature (I and Q) signals therefrom;

an adjustment unit connected to receive generated inphase and quadrature (I and Q) signals and operable to:

output an adjusted inphase and quadrature (I and Q) signals (I) signal in dependence upon a received first adjustment control signals signal; and

output an adjusted quadrature (Q) signal in dependence upon a received second adjustment control signal;

a delay unit connected to receive the generated inphase and quadrature (I and Q) signals and operable to delay those signals by respective first and second time delays to produce delayed inphase and quadrature (I and Q) signals, the respective first time delays delay being determined such that respective differences between detected and delayed inphase and quadrature (I and Q) (I) signals are minimized, and the second time delay being determined such that differences between detected and delayed quadrature (Q) signals are minimized; and

a delay calculation unit which is operable to generate the first and second adjustment control signals in dependence upon the respective first and second time delays and to supply the first and second adjustment control signals to the adjustment unit,

wherein the first and second adjustment control signals together are such as to cause the adjustment unit to compensate for a time delay between the detected inphase (I) and detected quadrature (Q) signals.

Claims 17-18 (canceled)

Claim 19 (original): A mobile telecommunications device comprising radio frequency circuitry and apparatus as claimed in claim 13.

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**Claim 20 (original):** A method of controlling radio frequency circuitry in a mobile telecommunications device comprising a method as claimed in claim 4.

**Claim 21 (canceled)**

**Claim 22 (original):** A method of controlling radio frequency circuitry in a mobile telecommunications device comprising a method as claimed in claim 9.

**Claim 23 (canceled)**

**Claim 24 (original):** A mobile telecommunications device comprising radio frequency circuitry and apparatus as claimed in claim 16.

**Claim 25 (new):** A method of adjusting timing of phase and amplitude components in an output Radio Frequency (RF) signal, the method comprising:

measuring a first delay amount that represents an amount by which a phase signal is delayed by RF circuitry that generates the output RF signal;

measuring a second delay amount that represents an amount by which an amplitude signal is delayed by the RF circuitry that generates the output RF signal;

generating a third delay amount based on a comparison between the first and second delay amounts;

generating a fourth delay amount based on a comparison between the first and second delay amounts;

generating phase and amplitude signals from input data;

delaying the generated phase signal by the third delay amount to produce a delayed phase signal;

delaying the generated amplitude signal by the fourth delay amount to produce a delayed amplitude signal; and

supplying the delayed phase signal and the delayed amplitude signal to the RF circuitry,

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wherein the third and fourth time delay amounts together are such as to compensate for a time delay between an output phase component of the RF signal and an output amplitude component of the output RF signal.

**Claim 26 (new):** A method of adjusting timing of inphase and quadrature (I and Q) components in an output Radio Frequency (RF) signal, the method comprising:

measuring a first delay amount that represents an amount by which an inphase (I) signal is delayed by RF circuitry that generates the output RF signal;

measuring a second delay amount that represents an amount by which a quadrature (Q) signal is delayed by the RF circuitry that generates the output RF signal;

generating a third delay amount based on a comparison between the first and second delay amounts;

generating a fourth delay amount based on a comparison between the first and second delay amounts;

generating inphase and quadrature (I and Q) signals from input data;

delaying the generated inphase (I) signal by the third delay amount to produce a delayed inphase (I) signal;

delaying the generated quadrature (Q) signal by the fourth delay amount to produce a delayed quadrature (Q) signal; and

supplying the delayed inphase (I) signal and the delayed quadrature (Q) signal to the RF circuitry,

wherein the third and fourth time delay amounts together are such as to compensate for a time delay between an output inphase (I) component of the RF signal and an output quadrature (Q) component of the output RF signal.

**Claim 27 (new):** An apparatus for adjusting timing of phase and amplitude components in an output Radio Frequency (RF) signal, the apparatus comprising:

a first delay measuring unit for measuring a first delay amount that represents an amount by which a phase signal is delayed by RF circuitry that generates the output RF signal;

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a second delay measuring unit for measuring a second delay amount that represents an amount by which an amplitude signal is delayed by the RF circuitry that generates the output RF signal;

a delay calculation unit that is operable to generate a third delay amount based on a comparison between the first and second delay amounts, and to generate a fourth delay amount based on a comparison between the first and second delay amounts;

a delay unit connected to receive generated phase and amplitude signals and operable to delay the generated phase signal by the third delay amount to produce a delayed phase signal, and to delay the generated amplitude signal by the fourth delay amount to produce a delayed amplitude signal; and

means for supplying the delayed phase signal and the delayed amplitude signal to the RF circuitry,

wherein the third and fourth time delay amounts together are such as to compensate for a time delay between an output phase component of the RF signal and an output amplitude component of the output RF signal.

Claim 28 (new): An apparatus for adjusting timing of inphase (I) and quadrature (Q) components in an output Radio Frequency (RF) signal, the apparatus comprising:

a first delay measuring unit for measuring a first delay amount that represents an amount by which an inphase (I) signal is delayed by RF circuitry that generates the output RF signal;

a second delay measuring unit for measuring a second delay amount that represents an amount by which a quadrature (Q) signal is delayed by the RF circuitry that generates the output RF signal;

a delay calculation unit that is operable to generate a third delay amount based on a comparison between the first and second delay amounts, and to generate a fourth delay amount based on a comparison between the first and second delay amounts;

a delay unit connected to receive generated phase and amplitude signals and operable to delay the generated inphase (I) signal by the third delay amount to produce a delayed inphase (I) signal, and to delay the generated quadrature (Q) signal by the fourth delay amount to produce a delayed quadrature (Q) signal; and

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means for supplying the delayed inphase (I) signal and the delayed quadrature (Q) signal to the RF circuitry,

wherein the third and fourth time delay amounts together are such as to compensate for a time delay between an output inphase (I) component of the RF signal and an output quadrature (Q) component of the output RF signal.